

B.A.R.G. News

Volume 19 Issue 3

April 1996

SUBMISSION TO PARLIAMENT AN INFORMATIVE DOCUMENT

Congratulations to those responsible for compiling the Submission to Parliament on the Amateur Radio Licensing System. It is an extremely well presented document and should be read by all Amateurs and those intending to become Amateurs.

Politicking aside, the draft presents what I consider to be the most informative and readable overview of Amateur Radio that, to my knowledge, has ever been available.

It contains a wealth of detail on the formation of our hobby and the amazing exploits and achievements of so many of our fraternity. We cannot forget most of the developments they brought about, as in most cases they are part and parcel of our everyday lives, but I am afraid that we do forget the clever individuals who 'made it all happen', or at least undertook the initial research, and the fact that in many instances they were Amateur Radio Operators.

Not least among these early Amateurs was a young Ballarat boy by the name of Henry Sutton, whose inventiveness was well appreciated during his lifetime, but unless articles setting out his achievements are published from time to time we tend to forget the ingenuity and foresight of this 'local lad', and his contribution to our society.

(See article this page & article in 'Amateur Radio' Feb.96 p.12.)



VK3BML

HENRY SUTTON was born in Ballarat in 1856 and was one of Australia's first radio amateurs, licensed by the Commonwealth circa 1900, and was a prolific inventor. Apparently a quick learner, he read science and engineering texts as a teenager and experimented with flying machines and an electric dynamo and motor. Apart from being credited with building a portable radio transceiver in 1900 he published, in 1885, a method for transmitting pictures over a distance by wire, he called it the 'telephane' a precursor to television. Sutton was also credited with having built Australia's first motor car, and was responsible for moving the motion which

created the R.A.C.V. He dabbled with many inventions, including flying machines, colour printers and light globes, but alas he could not be bothered with patents, and his work was largely not recognised. He died in Ballarat in 1914 where his father had established 'Suttons Musical Emporium' which traded for over 100 years in several centres throughout Victoria.

REG BROOK VK2AI, during 1930, combined his trade in the fledgling photographic industry with his interest in electronics and amateur radio to develop a product which has become a cornerstone of the Australian racing industry. Reg was responsible for devising the **photo finish camera**. A firm now operated by his son, still installs and services photo-finish cameras to this day.

MRS. VIOLET MacKENZIE OBE - VK2GA/2FV of Sydney was the first woman in Australia to obtain an experimental wireless licence in 1921, and she passed her Amateur exam in 1925. She became an electrician, and held a Diploma of Electrical Engineering. At the outbreak of WW2 she set up a school to teach the Morse Code, and trained thousands in the art, and later was responsible for the foundation of the WRANS.

An affiliate of the
Wireless Institute
of Australia (W.I.A.)
founded 1910



(The above excerpts are taken from the WIA draft submission and are an example of the wealth of excellent information contained throughout the document. Recommended reading - but don't forget the serious bits. Congratulations to Roger Harrison.-Ed)



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GEORGE SMALL (VK3DKJ) SK	JIM WRIGHT (VK3CFB)
KEVIN HUGHES (VK3WN)	PHIL SEDDON (VK3AQM)
STAN WIDGERY (VK3SE)	

CLUB STATION

VK3 BML

REPEATERS

VK3RBA (Voice)	146.750 MHz. - Mt.Buninyong.
VK3RBS (Voice)	146.900 MHz. - Smeaton Hill
VK 3RPC (Packet)	144.750 MHz. - Mt.Warrenheip.
VK3RBU (Voice)	438.475 MHz. - Mt.Hollowback.
VK3RMB (Beacon)	432.535 MHz. - Mt.Buninyong.
VK3RBV (ATV)	426.250 MHz. - Ballarat

ACTIVITIES CLUB NET: Thursday nights at 8 pm. (8.30 pm during Daylight Saving). Freq: 3.610 MHz +/- QRM.
 2 METRE SCRAMBLE: Sunday Nights at 7.50 pm. Freq: 146.425 to 146.600 MHz. Inc,
 Call back held on VK3RBA 146.750 MHz.

Logs monthly to D.Quirk - P.O. Box 78 - Newstead 3462 (or Meeting) to qualify.

MEETINGS: General Meeting : Last Friday of each month (except December) at 7.30 pm.

Venue: Ballarat Adult & Further Education Centre (BRACE) 602 Urquhart St. (Cnr. Windemere St.)

FOX HUNTING: As arranged during the year.

PLEASE ADDRESS ALL CORRESPONDENCE to: The Secretary - BARG Inc.

Box 1261
 Mail Centre
 Ballarat 3354

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Peter to the Rescue!

(THANKS PETER - Ed.)

Well, it seems that Norm's desperate attempts to encourage some articles out of the membership has all been for naught. So what prompts me to write an article, and what are my credentials?

Well yes, Norm's continual call for stuff, and the fact that I did promise him an article on my exploits at the New South Wales bushfires of January '94 does have a bearing. (My Commodore C-64 ate it !!! Really !!!).

My credentials are that I, like most of you, am an Amateur who likes to build on the odd occasion and sometimes must put brain to grindstone to work out a cheap and easy solution to life's mysteries, like how do I fix such and such without spending any money, and why does such and such behave in such an odd manner when I push this button, or why has my coffee gone cold, I only put it down beside the rig an hour ago?

I figure that anybody can write an article for our magazine, on any subject they like, as technical or non-technical as they like, and and if a few sat down and wrote about what's going on in **their** shacks lately, Norm would soon have to start putting glossy covers with nubile young **errrrr ... Radios** on the front !!!

Now where was I? Oh yes!! A junkbox antenna replacement for my mobile station. This all started when my XYL lost the top half of my High gain Dualband

mobile antenna while attending a fire. As I was entertaining Bill Trigg VK3JTW at home one weekend, she decided (very democratically) that she would answer all of the fire turnouts while Bill and I played around in the guts of his computer. That evening, after TWO turnout calls, I noticed it was GONE! After a quick look through the junkbox, which starts at the door of the shack, I soon found a solderless PL259 plug the type that screws up to the braid, and a short length of fibreglass whip that would fit down in the plug, a bit of Co-Ax centre, some braid and heatshrink tubing & - Hey Presto.

Shape the bottom end of the fibreglass whip so that the Co-Ax inner will slide into place in the plug and jut out over the end, then using about 450 - 460 mm of Co-Ax braid form the vertical element. Join them at about 10 mm from the top of the plug. Tighten the screw in the plug to hold the whip and the braid in place. Take a piece of heatshrink tubing about 400 mm long and stretch the bottom end over the the plug body to cover the screw and help hold it all together, and then shrink the tube.

The next step is to go out and mount it on your vehicle and tune it to resonance. When you are happy, cover the rest of the whip with heatshrink, leaving a half an inch hanging over the end, which you can fold over and fasten with the red knobby bit made from heatshrink! Enjoy !!!

So how does it work? Well obviously it's only a quarter wave but it's as good as any other quarter wave you're likely to come across. I managed to achieve an SWR of next to nothing, I think due partly to the constant 50 ohm impedance match at the plug and Co-Ax inner, the rest is just pure luck. Like I said, this isn't meant to be a technical masterpiece, just some of what's happening around MY shack.

What's next? Who knows. Could be almost anything! A power supply distribution box, or a coffee cup microwave receiver to keep the coffee warm!!

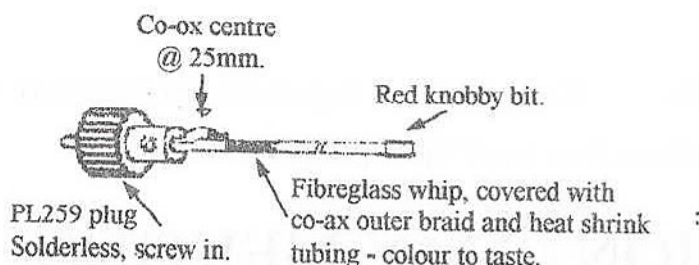
Cheers and 73 to all - Peter

VK3YZR.



So They Say!

- ◇ "The BARG HAMVENTION might win an Oscar this year Babe!"
- ◇ "Windows is just another pain in the glass."
- ◇ "My latest screen saver is called "Curtains for Windows."
- ◇ "If you always do what you've always done, you'll always have what you've already got."
- ◇ "Today is the Tomorrow you worried about Yesterday."
- ◇ "When God gave out **brains**, I thought he said **trains**, and I missed mine!"





The Minutes



of the Meeting held 29th March 1996

MEETING OPENED at 1936 hrs. Members and visitors were given a hearty welcome from President Gordon VK3FGC.

APOLOGIES were then accepted on behalf of VK3's SE, JFL, LBA, DS, NIZ, CFB, AEX, YMW, DMK, BVI and N9NAY.

Special best wishes for a speedy recovery to our ill members.

VBA/WN

MINUTES of the February meeting were accepted as circulated.

BNC/AAI

CORRESPONDENCE - In A.R. Magazine W&N.S.A.R.C.
H.B.A.R.C. N/Letter .. Capricornia R.C.
E.M.D.R.C. News.
W.I.A. Licence submission.
Thanks from family of VK3GM (SK)

Out - S.M.A. re RBV.

ADB/XDQ

TREASURERS REPORT

Accounts for payment:

Time Life Trophies (Badges)	\$32.00
SMA VK3RBA Licence	\$32.66
WIA Membership	\$72.00
WIA Exam Service	\$20.00
Aust. Post box rental	\$40.00
John Graham - Printing	\$27.75
N. D'Angri - Postage (News)	\$35.28
John Graham - Printing	\$22.75
Charles Stewart - Postage	\$12.00

KGL/DCS

REPORTS - QSL's - Very few to report !!! Listen out for proposed competition. VK3VBA

NET - Quieter the last couple of weeks. VK3CCB

TECHNICAL - New antenna for RPC in hand. Awaiting installation.

3105 chips are available at 'Ripon St.'

Boards can be obtained at Monday night Prac. sessions. VK3BNC.

EDUCATION - On task. Pleasing Progress. VK3DCS.

GENERAL BUSINESS - From SMA .. "Renewal of Licence" Late payment may result in a financial penalty. (Suggested 30 days overdue - \$44.00 penalty.)
or worse - a reallocation of callsign.
(Chat with Jim VK3ANH !! Sec.)

Letter of thanks to Capt. Peter Terrill re visit to Ansett Simulator.
A TOP NIGHT !!! Unanimous.

VISITATIONS - BBQ at Fiskville 14th April - 11.30 AM VK3FMC.

MEETING CLOSED 2030 hrs. (Wow Gordon that must be a record !!!!)

NEXT MEETING April 26th.

FINALLY - I don't mind going to work, It's the long wait to go home that bothers me !!!!

Have a good month Cheers from Geoff VK3ADB.

JUNK AUCTION - MAY MEETING

96/04

5

A DX PACKET CLUSTER ?

With TNX to Tony VK3TZ and the 'Radio Bulletin' the official Journal of the E.M.D.R.C. from whose March '96 edition this article was condensed.

EVER WONDER why pileups get so big so quickly these days? Get hot under the collar because that 16 year old kid in the states has got 300 countries confirmed in 12 months while you are still struggling to get to 250 worked after five years of searching? Are you stumped at how those DX bulletins get all that operating information about those rare DX stations? Have you ever wondered why the DX pileups never give their callsigns any more and why so few ask for the call?

It all comes from the **DX Packet Clusters** which have been around since the late 1980s in the US but are still being ignored here in Australia. Well the VK6s have had one going for 12 months and ZLs have got one but the big metropolises in the eastern seaboard of Australia are yet to crawl out of the steam room and see what's happening in the 1990s.

So just what is a Packet Cluster?

A DX Packet Cluster is a system which allows DX enthusiasts to share DX information between each other in a very time efficient manner using Packet Radio. A central node, much the same as a BBS, runs the host software and allows users to connect to it, in order to send and receive DX data. The Melbourne DX cluster allows for a maximum of 32 concurrent users. One big difference between a BBS and a cluster is that as the number of concurrent users in a cluster increases so does the fun.

The DX cluster software has a wide variety of commands which allow for many kinds of functions to be performed. Some of the larger clusters in the US and Europe are all interconnected so that it is not unusual for the complete network to be supporting 400 to 500 users, covering the continents of North America, South America, Europe and Oceania.

Some functions supported by the cluster software are:

- * DX Spotting / Alerts.
- * Conference and keyboard to

- keyboard talk modes.
 - * Mail and DX related bulletins.
 - * Support for callbook searches and the GO-LIST QSL directories.
 - * Sunrise and Sunset times worldwide, MUF predictions.
 - * Support for logging of WWV sunspot data.
 - * Database search functions for particular bands.
 - * Prefixes or Callsigns.
 - * Database support for a country needs lists for each user.
- and many others such as on-line help.

As much as this sounds complicated, it is in fact very easy to use the cluster for the basic functions of logging and searching for DX.

One of the main things to remember about the cluster is that it will alert you, or 'beep' when a DX station has been Logged or Spotted by another user providing that you are logged on to the cluster. The more stations that are logged on, the more chance there is that the DX you are looking for will be spotted and the greater the chance you will have to increase your country total for DXCC, Honors Roll, 5BDXCC, 5BWAZ, IOTA etc.

Cluster Commands.

The main activity on a cluster is DX spotting. A special command known as the 'DX' command allows one of the users to alert all the other users about the DX station/s he/she is receiving or has found while tuning around the bands. The format of the command is as follows:

DX Frequency (KHz) Callsign Comment

For example if VK3QQQ was tuning around 20m and came across YA1AA calling CQ he would use the command:

DX 14216.7 YA1AA Calling CQ at s9 plus

An alert packet would then be sent to all users and the info would be stored in the DX database.

To log an IOTA station working

on 21.260 use the command:
DX 21260.0 VP8XYZ
Sth.Shetlands IOTA SA123

THE DX COMMAND IS THE MOST IMPORTANT COMMAND THAT NEEDS TO BE USED IF THE PACKET CLUSTER IS TO BE A SUCCESS IN AUSTRALIA.

Another most useful feature of the packet cluster is the ability to get a list of the DX spots that have been made recently. The SHOW command gives us this ability as well as many other options.

- * To look at the last 5 DX Spots use the command: *SH/DX*
- * To see the last 20 DX Spots use the command: *SH/DX/20*
- * To look at the last 10 Spots on 20m use the command: *SH/DX/10 20*
- * To look at the last 5 Spots for China use the command: *SH/DX/10 BY*
- * To look at the last 10 Spots for D44AB use the command: *H/DX/10 D44AB*

The last 2 options are very useful for getting to know when and where to look for a particular country or the operating habits of a particular station.

The SHOW command can also be used to show other types of information such as:

- * *SHoW/USers* - Shows all of the users currently logged into the DX cluster.
- * *SHoW/MUF Prefix* - Shows the MUF to the country allocated by the prefix.
- * *SHoW/WWV* - Shows the last 5 WWV sunspot announcements logged.
- * *SHoW/Notice* - Shows the latest SYSOP message to users.

The TALK Command

One function which is useful when the DX activity is sparse or if you want to alert your best DX Buddy before everyone else, is the TALK command. This function sends a message only to the user specified.



PACKET CLUSTER

Continued from P6.

For example:

* **TALK VK3QAA** Mick, check 14.002. Is it 3Y1FA or 3Y1UR?

This command would send a one line message to VK3QAA and then revert back to normal operation. The following command sets up a permanent link between the two stations so that all input is directed to each other rather than to the cluster.:

TALK VK3QAA

In this mode everything that you type on the keyboard will be sent to VK3QAA except for a few important commands which will still be interpreted by the cluster.

To exit the TALK mode you must type "/EX"

The final command we will discuss here is the DIR command. This functions like the 'L' command you would use at your BBS and allows you to list all the messages on the cluster. You can leave personal messages on the cluster much the same as on a BBS as well as leave Bulletins to all. This is great for advance warning on DXpeditions, QSL routes, OPDX and ARRLDX bulletins etc.

Of course the cluster software supports on-line help which can be accessed using the '?' or 'HELP' command. Options include the ability to specify help on a specific command, e.g.:

- * **HELP** - General command list.
- * **HELP/SH** - List of options available with the SHOW command.
- * **HELP/DX** - Help using the DX command.
- * **HELP/WWV** - Help with the WWV command which logs solar activity.

Using the DX Cluster.

The Melbourne DX Packet Cluster is now operational in Melbourne on 144.850 MHz operating at 1200 Baud. Interstate users or those unable to access directly may wish to try access via a node hop to VK3IRW-2 (IRWNOD). Connect to VK3UR on port 2.

All DXers are invited to log onto the cluster and spot some DX. Signal reports for the node would be appreciated as well as access availability through the NET/ROM. VK3IRW sometimes has a link to VK3UR on 144.850 MHz.

Good DX from Tony VK3TZ - Sysop at VK3UR Melb.DX Cluster.

KNOW YOUR Q CODE ?

Q	V	V	Y	L	F	N	Q	J	O	Z	A	I
S	H	A	Z	P	R	Q	S	B	N	S	B	P
Y	I	H	F	R	P	Q	F	V	T	H	M	H
Q	Z	P	O	Q	S	Z	K	M	H	R	X	D
A	R	J	Q	L	Q	C	Q	Q	Q	U	L	U
T	U	T	U	V	R	E	R	Q	G	F	J	S
R	H	O	H	S	S	X	Z	M	Q	G	Q	Z
Q	Y	T	X	Q	A	O	A	I	S	F	T	N
R	X	J	Y	M	O	S	Q	N	T	H	R	Q
X	G	K	Q	Q	B	Q	D	C	R	Y	Z	H
C	Q	R	S	V	T	F	Q	V	F	Q	Q	O
J	O	P	E	R	S	P	J	M	B	I	D	Y
V	V	Z	O	Q	J	K	O	I	Q	R	Q	V

How well do you know your Q Code ?
Here's a refresher course to smarten it up a little.

Degree of difficulty :
3 Stubbies - Brilliant
4 Stubbies - Average.



- 1 Is my transmission being interfered with ?
- 2 Are you troubled by static ?
- 3 Shall I stop sending ?
- 4 Are you ready ?
- 5 When will you call me again ?
- 6 Who is calling me ?
- 7 Can you acknowledge receipt ?
- 8 Can you communicate with direct or by relay ?
- 9 Shall I send a series of Vs on this frequency ?
- 10 Shall I change to transmission on another frequency ?
- 11 What is your location ?
- 12 What is the correct time ?
- 13 General call preceding a message addressed to all amateurs ?
- 14 Are my signals fading ?
- 15 Shall I send faster ?
- 16 Shall I decrease power ?
- 17 Shall I increase power ?
- 18 Does my frequency vary ?
- 19 Shall I send more slowly ?
- 20 Will you relay to ?

NOTE

The affirmative or confirming replies to the clues listed are also applicable in each case.
Answers on Page 8.



MOORABIN HAMFEST

Saturday 11th. May 1996 (10am-3pm)

Brentwood Secondary College - Glen Waverly

Melways Ref. 71 C7

ENTRANCE \$3 - Talk in on VK3RML 146.700MHz.

96/04 7



Check out the NEW Castrol GAS ENGINE OIL SAE 15W-40SG API rated and designed to ensure maximum engine life and minimum oil consumption for LPG fueled engines.

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73 de Bill VK3PH



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1ST. FACTS.

- * The first **CLOCKWORK TRAIN** was made by George Brown, a watchmaker from Connecticut, in 1856.
The first model train set with complete track layout also worked by clockwork, was made in 1891 by the Märklin Brothers of Göppingen, West Germany.
- * In 1926 a Scotsman, John Logie Baird, gave the first public demonstration of **TELEVISION** in his workroom at Frith St. London. The first person to be seen on television was a fifteen year old boy, William Taynton, who had to be bribed with money before he would stand in front of the camera.
- * **SCREWS** were a development of the nail, and they first appeared in the 16th. century. In about 1550 the screwdrivers were known as 'turnscrews' and were used by gunsmiths and armourers to adjust their gun mechanisms.
- * **COCA-COLA** was invented by Dr. John Pemberton from Atlanta in USA. It was launched as a "brain tonic" in March 1886, and was first bottled in 1894 by Joseph Biendenham.
- * The first **ELECTRIC TORCH** was square in shape and was made by the British Electric Lamp Company in 1891. Sixty samples of the first model were made for use by ticket inspectors of the Bristol Omnibus Company in 1892. The Electric and Novelty Company of New York, (later to be known as the Eveready Company) brought out the first tubular electric torch in 1898.

COMING EVENTS AND INFORMATION

April 26th. General Meeting.

May 22nd. Committee Meeting.

May 31st. General Meeting. 

June 19th. Committee Meeting.

June 29th. General Meeting.

Monday Nights - Practical Nights.

2M Scramble - Sunday Nights 7.50pm 146.425 to 146.600 Mhz.

Club Net - Thursday Nights 8pm. 3.610 +/- QRM - (8.30pm during Daylight Saving.)

WICEN Training Nights - 4th. Wednesday each month.

JUNK AUCTION



INFORMATION

Q CODE ANSWERS

QRM	QRX	QSV	QST	QRO
QRN	QRZ	QSY	QSB	QRH
QRT	QSL	QTH	QRQ	QRS
QRV	QSO	QTR	QRP	QSP

B.A.R.G.

THE BALLARAT AMATEUR RADIO GROUP INC.

A GROUP OF RADIO ENTHUSIASTS LICENSED TO EXPERIMENT
WITH LOCAL & INTERNATIONAL RADIO COMMUNICATIONS ON AN AMATEUR BASIS.

NEW MEMBERS ALWAYS WELCOME

OFFICIAL NEWSLETTER OF THE BALLARAT AMATEUR RADIO GROUP INC.

B.A.R.G. NEWS



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